PCT DOCUMENT INDEX SHEET

- ☐ TRNA _____ Transmittal New Application
- ☐ SPEC _____ Specification
- ☐ CLM _____ Claims
- ☐ ABST _____ Abstract
- ☐ DRW _____ Drawings
- ☐ OATH _____ Oath or Declaration

- ☐ A... _____ Amendment
- ☐ A.PE _____ Preliminary Amendment
- ☐ ADS _____ Application Data Sheet
- ☐ AF/D _____ Affidavit or Exhibit Received
- ☐ REM _____ Applicant Remarks in Amendment

- ☐ IDS _____ Information Disclosure Statement
- ☐ FOR _____ Foreign Reference
- ☐ NPL _____ Non-Patent Literature
- ☐ FRPR _____ Foreign Priority Papers
- ☐ C.AD _____ Change of Address [if not filing date]
- ☐ PA.. _____ Power of Attorney [if not filing date]

- ☐ BIB _____ Bibliographic Data Sheet
- ☐ WCLM _____ Claim Worksheet
- ☐ WFEE _____ Fee Worksheet
- ☐ SRNT _____ Examiner Search Notes

- ☐ Petition _____ Petition
- ☐ PGEA _____ Petition under 37 CFR 1.138 (c) [Abandonment]
- ☐ PET.WDISS _____ Petition under 37 CFR 1.313 (c) [Withdraw]
- ☐ 136A _____ Blanket authorization to charge fees

- ☐ LET. _____ Miscellaneous Incoming Letter
- ☐ IMIS _____ Miscellaneous Internal Document
- ☐ CTMS _____ Miscellaneous Office Action

PCT DOCUMENTS

- ☐ ARTIFACT _____ Artifact
- ☐ CRFS _____ Computer Readable Form Statement
- ☐ CRFL _____ Computer Readable Form Listing
- ☐ SEQLIST _____ Sequence Listing

- ☐ COMPUTER _____ Computer Program Listing
- ☐ RETMAIL _____ Mail Returned by USPS
- ☐ SPEC NO _____ Specification Not in English
- ☐ XT/ _____ Extension of Time [if not filing date]

- ☐ M903 _____ DO/EO Acceptance
- ☐ M905 _____ DO/EO Missing Requirement
- ☐ 371P _____ PCT Papers in a 371 Application
- ☐ PETDEC _____ Petition Decision

DOCUMENT DATE _____

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PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	)
Richard Francis Russell, et al.	) Group: 2152
Serial No.: 09/818,179	)
Filed: March 27, 2001	)
Title: METHOD OF SHARING A PRINTER	) Examiner: V. Lesniewski

BRIEF OF APPELLANTS

MS APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the decision of the Examiner, dated April 3, 2006, finally rejecting claims 1-23. Appellants timely filed a Notice of Appeal and a Pre-Appeal Brief Request for Review in this matter on June 30, 2006. A Notice of Panel Decision mailed on July 21, 2006, indicated that the present case should proceed to the Board of Patent Appeals and Interferences, with claims 1-23 remaining as rejected.

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II. REAL PARTY IN INTEREST

The real party in interest in this appeal is Lexmark International, Inc., a corporation organized and existing under the laws of the State of Delaware, which owns the entire interest in this patent application as set forth in the underlying claimed invention.

III. RELATED APPEALS AND INTERFERENCES

No related Appeals or Interferences are known to the Appellants.

IV. STATUS OF CLAIMS

Pending: Claims 1-23

Canceled: None

Allowed: None

Objected To: None

Rejected: Claims 1-23

Withdrawn from Consideration: None

On Appeal: Claims 1-23

V. STATUS OF AMENDMENTS

All amendments have been entered. No amendments have been submitted subsequent to the AMENDMENT ACCOMPANYING RCE mailed January 3, 2006.

VI. SUMMARY OF CLAIMED SUBJECT MATTER

The present Summary of Claimed Subject Matter includes background information in support of the claims (Section VI (A)), which is set forth immediately below, followed by a summary of each independent claim (Section VI (B)), including reference to Appellants' specification by page and line number, and reference to Appellants' drawings.

A. Background Information

The present invention relates to a method of sharing a printer, and, more particularly, to a method of sharing a printer on a computer network. (Spec. at page 1, lines 6-7).

There is shown in Fig. 1 "a segment of a network employing host-based networking. One node, a workstation, is attached to the network medium. A second node, a host-based networking printer 10, is likewise connected to the same network. Printer 10 includes a host-based printer 12 and host-based networking hardware 14. Though not shown, many other nodes may be connected and operate simultaneously on this network oblivious to these two devices." (Spec. at page 3, lines 8-14).

A "host-based paradigm separates the image processing (fonts, images, etc.) from the physical printing mechanism such that the intensive raster image processing is performed on the host computer, leaving the printer's processor free to perform the task of physically placing the pixels on the media. The processing power required to physically place the pixels is significantly smaller than that required of printers that also interpret data streams." (Spec. at page 1, lines 11-17). To facilitate printing, the print driver, i.e., the application, running on each workstation, i.e., host (see Fig. 3), must be able to create host-based networking printer specific data and deliver it in order and unaltered to the host-based networking printer. Workstation host-based networking

print drivers are designed to cooperate in order to facilitate the "fair-sharing" of the host-based networking printer amongst a number of workstations. (Spec. at page 3, lines 15-19).

A data channel is used to send print objects from the workstation host-based printer driver to the printer using a "payload" field of a communications frame. A command channel is used to signal the host-based networking hardware, e.g., the host based networking hardware 14 of host-based networking printer 10. (Spec. at page 3, line 28-Page 4, line 9)

"According to the command channel logic, the host-based networking hardware waits for a command signal to do something. If the command is a connect signal, then the printer checks for data channel ownership. If the data channel is not in use, then the sender of the connect signal is recorded as the owner of the data channel and the STATUS response containing the new owner is transmitted to the sender. If, on the other hand, the data channel already has an owner, then the STATUS response containing the current owner is sent to the sender of the connect signal." (Spec. at page 5, lines 8-14).

Only one workstation is allowed to "own" the data channel at any given point in time. (Spec. at page 4, lines 6-7). "On the data channel, only frames from the data channel owner are processed by the host-based networking hardware. All other frames are discarded with no response. All frames from the data channel owner are acknowledged to the sender of the frame. The acknowledgement includes the frame number." (Spec. at page 6, lines 3-6).

A "workstation can transmit a data frame into the network such that an initial portion of the data frame includes a unique, identifying data sequence that indicates the data in the next portion of the data frame is in a format that can be recognized as print data and passed on to printer 12 by host-based networking hardware 14. The media access hardware or other hardware within host-based networking hardware 14 can receive the initial portion of the data frame and

determine whether it includes the unique, identifying data sequence. If so, host-based networking hardware 14 reads, processes and sends the next portion of the data frame to printer 12. If not, host-based networking hardware 14 ignores the next portion of the data frame and discards the data frame without performing any further processing." (Spec. at page 6, lines 12-21).

B. Summary of Independent Claims

Claim 1. Referring to Figs. 1 and 3, a method of sharing a printer 10 between a plurality of users on a computer network includes: attaching host-based networking hardware 14 to the printer 10; providing a network communication protocol defining a command channel and a data channel (Spec. at page 1, lines 30-31; page 4, lines 4-16); allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis (Spec. at page 3, lines 17-19; page 4, lines 6-7; page 5, lines 8-14); and instructing the host-based networking hardware 14 to accept information on the data channel only from the user that owns the data channel (Spec. at page 6, lines 3-6).

Claim 17. Referring to Figs. 1 and 3, a method of sharing a network appliance 10 between a plurality of users on a computer network includes: providing a network communication protocol defining a command channel and a data channel (Spec. at page 1, lines 30-31; page 4, lines 4-16); allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis (Spec. at page 3, lines 17-19; page 4, lines 6-7; page 5, lines 8-14); and instructing the network appliance 10 to accept information on the data channel only from the user that owns the data channel (Spec. at page 6, lines 3-6).

Claim 18. Referring to Figs. 1-3, a method of sharing a network appliance 10 between a plurality of users on a computer network on a fair-sharing first come first serve basis (Spec. at page 3, lines 17-19; page 4, lines 6-7; page 5, lines 8-14) includes using one of the users to transmit a data frame into the computer network (Spec. at page 6, lines 12-13); receiving the data frame with the network appliance 10 (Spec. at page 6, lines 15-18); determining whether a first portion of the data frame includes a unique, predetermined sequence of data (Spec. at page 6, lines 15-18); reading and processing a second portion of the data frame if the first portion of the data frame includes the predetermined sequence of data (Spec. at page 6, lines 18-19); and discarding the data frame without reading and processing the second portion of the data frame if the first portion of the data frame does not include the predetermined sequence of data (Spec. at page 6, lines 19-21).

VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-10, 12, 17, 18 and 20-23 were rejected under 35 U.S.C. §102(e) as being anticipated by Yamazaki (U.S. Patent No. 6,785,727 B1).

B. Claims 11 and 13-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki.

C. Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki in view of Official Notice.

VIII. ARGUMENT

A. Claims 1-10, 12, 17, 18 and 20-23 Are Not Anticipated By Yamazaki (U.S. Patent No. 6,785,727 B1) Under 35 U.S.C. §102(e)

In the Final Office Action dated April 3, 2006, claims 1-10, 12, 17, 18 and 20-23 were rejected under 35 U.S.C. §102(e) as being anticipated by Yamazaki (U.S. Patent No. 6,785,727 B1). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). MPEP 2131. As set forth below, for each of claims 1-10, 12, 17, 18 and 20-23, each and every element is not found, either expressly or inherently described, in Yamazaki. Appellants submit that claims 1-10, 12, 17, 18 and 20-23 are not disclosed, taught, or suggested by Yamazaki, and are therefore patentable in their present form.

1. Yamazaki

Yamazaki is not a fair-sharing first come first serve system. Yamazaki provides an image processor making it possible to reserve a printer even if no job is generated and to be shared by a plurality of users in order to preferentially and securely process a job of a reserver in a reserved time zone, which accepts a reservation of a job while no job is received. (Yamazaki Abstract). "The start time of a reserved time zone is input to 601 and 602. The end time of the reserved time zone is input to 603 and 604. By pressing the "OK" button of 605, the reserved time is transmitted to an image processor. The reserved time is stored in the timetable 501 in Fig. 5. When the reserved time set here is already reserved by other user, it is necessary to reset a reserved time." (Yamazaki at column 8, lines 28-34).

Yamazaki further states at column 7, lines 54-60, "For the first embodiment of the present invention, a case is described in which a job of a party other than a reserver is rejected in a reserved time zone and only a print job of a reserver is quickly processed in a reserved time zone by estimating the required time of a job *even before a reserved time* and rejecting the processing of a job whose processing is not completed before the reserved time." (Emphasis added.) As further stated in the Yamazaki at column 13, lines 26-33, "The first embodiment of the present invention makes it possible to reserve a resource in order to *preferentially* and securely process a job of a reserver in a reserved time zone. Therefore, in case of a second embodiment of the present invention, a case of setting a reserved time zone to a job or changing reserved time zones and moreover, a case of setting a reserved time zone to a file to be printed will be described." (Emphasis added).

Further, the system of Yamazaki is not a host-based paradigm wherein intensive raster image processing is performed on a host. In Yamazaki Fig. 1, symbol 1000 denotes a printer which inputs and stores printing information (such as character codes) and from information or a macro instruction supplied from a host computer (refer to Fig. 2), and is connected to a local area network (LAN) through a network board 1017. Symbol 1001 denotes a printer control unit for controlling the whole of the printer 1000 and *analyzing character information* and the like supplied from the host computer. (Column 3, line 60-column 4, line 5; emphasis added).

An application 1101 running on host computer 2000 of host 3000 provides a graphic user interface for a user to generate video data meeting a purpose of the user. The printer driver 1102 converts the video data generated by the application 1101 into page description language (PDL) data which can be printed by the image processor 1000. (Column 15, lines 6-

16). Referring to Fig. 9, control unit 1001 of printer 1000 includes a PDL analyzer 903 that develops the printing information (PDL) to be actually output stored in the receiving buffer 902 into image data that can be printed. (Column 13, lines 50-52). The job packet generator 1107 of host 2000/3000 (see Figs. 2 and 11) connects packet head information with output data (PDL) and generates a job packet serving as an output data packet. PDL data is directly set to the data part of the job packet. (Column 17, lines 58-61). Thus, a reserved print job is generated in the form of a packet and transmitted from the host computer 2000 to the image processor 1000 through the logic channel controller 1106. (Column 18, lines 16-19).

2. Claim 1 Is Patentable Over Yamazaki

Claim 1 is directed to a method of sharing a printer between a plurality of users on a computer network. The method includes attaching "host-based networking hardware" to the printer. A "host-based paradigm separates the image processing (fonts, images, etc.) from the physical printing mechanism such that the intensive raster image processing is performed on the host computer, leaving the printer's processor free to perform the task of physically placing the pixels on the media. The processing power required to physically place the pixels is significantly smaller than that required of printers that also interpret data streams." (Spec. at page 1, lines 11-17; emphasis added). In contrast, while Yamazaki uses a host in a network printing environment, the system disclosed in Yamazaki does not satisfy Applicants' definition of a host-based paradigm, as set forth above, since the control unit 1001 of printer 1000 in Yamazaki must perform resource intensive tasks, including the processing of page description language (PDL) data packets received from host 2000/3000. (See Yamazaki column 3, line 60-column 4, line 5; column 13, lines 50-52; column 15, lines 6-16; column 17, lines 58-61).

Accordingly, contrary to the assertion made by the Examiner, in Yamazaki control unit 1001 is not host-based networking hardware, within the context of the present invention.

Notwithstanding the above, claim 1 further recites providing a network communication protocol defining a command channel and a data channel; allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis; and instructing the host-based networking hardware to accept information on the data channel only from the user that owns the data channel.

Appellants' specification is instructive as to the meaning of the term "fair-sharing first come first serve basis". Claims are not to be read in a vacuum and while it is true they are to be given the broadest reasonable interpretation during prosecution, their terms still have to be given the meaning called for by the specification of which they form a part. *In re Royka and Martin*, 490 F.2d 981, 180 USPQ 580, 582 (CCPA 1974). As stated in Applicants' specification at page 3, lines 17-19, "Workstation host-based networking print drivers are designed to cooperate in order to facilitate the "fair-sharing" of the host-based networking printer amongst a number of workstations." As further stated at page 5, lines 8-14, "According to the command channel logic, the host-based networking hardware waits for a command signal to do something. If the command is a connect signal, then the printer checks for data channel ownership. If the data channel is *not in use*, then the sender of the connect signal is recorded as the owner of the data channel and the STATUS response containing the new owner is transmitted to the sender. If, on the other hand, the data channel already has an owner, then the STATUS response containing the current owner is sent to the sender of the connect signal." (Emphasis added). Thus, in accordance with Appellants' invention, the data

channel is shared fairly, i.e., each workstation has an equal chance of capturing the data channel, and also the data channel is shared on a first come first serve basis.

Accordingly, with the present invention data channel ownership is based on fair-sharing of the data channel on a first come first serve basis, and importantly, is not a reserved time zone based system.

The Examiner asserts that Yamazaki discloses "allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis;" at column 8, lines 28-34. However, Yamazaki states at column 8, lines 28-34, that, "The start time of a reserved time zone is input to 601 and 602. The end time of the reserved time zone is input to 603 and 604. By pressing the "OK" button of 605, the reserved time is transmitted to an image processor. The reserved time is stored in the timetable 501 in Fig. 5. When the reserved time set here is already reserved by other user, it is necessary to reset a reserved time." (Emphasis added). Thus, the passage relied on by the Examiner demonstrates that in Yamazaki, a reservation is placed to establish preferential use of the data channel in a reserved time zone. However, as further set forth below, in Yamazaki a user first in time in desiring actual use of the data channel may be denied data channel ownership. Accordingly, Yamazaki does not provide for *data channel ownership* by only one user *on a fair-sharing first come first serve basis.*

Consider the following in further support of the differences between a fair-sharing first come first serve system of Appellants' invention, and the time zone reservation basis approach disclosed in Yamazaki. Yamazaki further states at column 7, lines 54-60, "For the first embodiment of the present invention, a case is described in which a job of a party other than a reserver is rejected in a reserved time zone and only a print job of a reserver is quickly

processed in a reserved time zone by estimating the required time of a job *even before a reserved time* and rejecting the processing of a job whose processing is not completed before the reserved time." (Emphasis added.) As further stated in the Yamazaki at column 13, lines 26-33, "The first embodiment of the present invention makes it possible to reserve a resource in order to *preferentially* and securely process a job of a reserver in a reserved time zone. Therefore, in case of a second embodiment of the present invention, a case of setting a reserved time zone to a job or changing reserved time zones and moreover, a case of setting a reserved time zone to a file to be printed will be described." (Emphasis added). Thus, clearly the system of Yamazaki does not assign *data channel ownership* on a fair-sharing first come first serve basis, but rather Yamazaki expressly gives *preferential treatment* to a reserver in a reserved time zone even if another user is first in time in attempting to use the data channel.

The differences between Appellants' claimed invention, and the system of Yamazaki may be further understood by way of analogy. Consider a fast food restaurant as providing fair-sharing first come first serve services, and an upscale restaurant as providing reserved time zone services. In the case of the fast food restaurant, no reservations are taken with each customer having an equal opportunity to be first in line, and each customer is served in the order of arrival (fair-sharing first come first serve). In contrast, in the case of an upscale restaurant, a reservation is placed a particular time at a designated table such that the reserver is preferentially served in the reserved time zone, and no other will be permitted in that reserved time zone for that table even if they arrive first (not fair-sharing first come first serve). Just as the principles of operation of a fast food restaurant is different from that of an upscale restaurant, the principles of operation of Appellants' invention is different from that disclosed in Yamazaki.

Thus, Yamazaki does not disclose, teach or suggest "allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis", as recited in claim 1.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 1 under 35 U.S.C. 102(e).

3. Claims 2-4 Are Patentable Over Yamazaki

Claims 2-4 are believed patentable at least due to their dependence, directly or indirectly, on otherwise allowable base claim 1.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 2-4 under 35 U.S.C. 102(e).

4. Claim 5 Is Patentable Over Yamazaki

Claim 5 is directed to the method of claim 4, wherein the status response indicates the user that owns the data channel. The Examiner asserts that Yamazaki discloses in Fig. 16 an "Owner". However, the "Owner" designation in Fig. 16 is with reference to the Owner of the document, rather than any perceived ownership of a data channel. Accordingly, claim 5 is believed patentable in its own right.

In addition, claim 5 is believed patentable at least due to its dependence from base claim 1 and/or any respective intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 5 under 35 U.S.C. 102(e).

5. Claims 6 And 7 Are Patentable Over Yamazaki

Claims 6 and 7 are believed patentable at least due to their respective dependence, directly or indirectly, on otherwise allowable base claim 1.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 6 and 7 under 35 U.S.C. 102(e).

6. Claim 8 Is Patentable Over Yamazaki

Claim 8 is directed to the "method of claim 6, wherein a user that does not own the data channel can acquire the data channel by sending a connect signal on the command channel to the host-based networking hardware." (Emphasis added). In rejecting claim 8, the Examiner relies on Yamazaki, column 8, lines 28-34. However, the cited passage is directed to the reservation protocol, wherein if a desired reserved time is already taken, then it is necessary to reset the reserved time. The cited passage does not disclose, teach, or suggest the subject matter of claim 8, and in particular, is not directed to sending a connect signal on the command channel as recited in claim 8. Accordingly, claim 8 is believed patentable in its own right.

In addition, claim 8 is believed patentable at least due to its dependence from base claim 1 and/or any intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 8 under 35 U.S.C. 102(e).

7. Claim 9 and 10 Are Patentable Over Yamazaki

Claims 9 and 10 are believed patentable at least due to their dependence, directly or indirectly, on otherwise allowable base claim 1.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 9 and 10 under 35 U.S.C. 102(e).

8. Claim 12 Is Patentable Over Yamazaki

Claim 12 is directed to the method of claim 10, wherein the communication frame has a frame number and a sequence number, the host-based networking hardware discarding any said communication frame that does not have an expected said sequence number. In rejecting claim 12, the Examiner relies on Yamazaki column 13, lines 43-46; column 13, lines 66-column 14, line 6; and column 22, lines 57-59. However, the cited passages reference "sequence" as a job number (see Fig. 17), which are assigned by the job preprocessor 1110, within printer 1000 (Yamazaki column 22, lines 47-49; Fig. 11), and the PDL translator 1112 of printer 1000 analyzes the job (Yamazaki column 22, lines 54-59; Fig. 11) and any ignoring of commands is by PDL translator 1112 of printer 1000, with no reference to a "*host-based networking hardware discarding any said communication frame* that does not have an expected said sequence number." (Emphasis added). Further, as set forth above with respect to claim 1, having a PDL (page description language) translator in printer 1000 would mean that printer 1000 is not operating in a "host-based" paradigm as the term is defined in Appellants' specification at page 1, lines 11-15. Accordingly, claim 12 is believed patentable in its own right.

In addition, claim 12 is believed patentable at least due to its dependence from base claim 1 and/or any intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 12 under 35 U.S.C. 102(e).

9. Claim 17 Is Patentable Over Yamazaki

Claim 17 is directed to a method of sharing a network appliance between a plurality of users on a computer network. The method includes providing a network communication

protocol defining a command channel and a data channel; allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis; and instructing the network appliance to accept information on the data channel only from the user that owns the data channel.

Yamazaki does not disclose, teach or suggest "allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis", for the reasons set forth above with respect to claim 1, which for brevity will not be repeated here.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 17 under 35 U.S.C. 102(e).

10. Claim 18 Is Patentable Over Yamazaki

Claim 18 is directed to a method of sharing a network appliance between a plurality of users on a computer network on a fair-sharing first come first serve basis. Claim 18 recites, in part, determining whether a first portion of the data frame includes a unique, predetermined sequence of data; reading and processing a second portion of the data frame if the first portion of the data frame includes the predetermined sequence of data; and discarding the data frame without reading and processing the second portion of the data frame if the first portion of the data frame does not include the predetermined sequence of data.

Yamazaki does not disclose, teach or suggest "sharing a network appliance between a plurality of users on a computer network on a fair-sharing first come first serve basis", for the reasons set forth above with respect to claim 1, which for brevity will not be repeated here.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 18 under 35 U.S.C. 102(e).

11. Claims 20-23 Are Patentable Over Yamazaki

Claims 20-23 are believed patentable at least due to their dependence from otherwise allowable base claim 18.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 20-23 under 35 U.S.C. 102(e).

B. Claims 11 and 13-16 Are Patentable Over Yamazaki Under 35 U.S.C. §103(a)

In the Final Office Action dated April 3, 2006, claims 11 and 13-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art reference. MPEP 2143 (Emphasis added). As set forth below, Appellants submit that claims 11 and 13-16 are not disclosed, taught, or suggested by Yamazaki, and are therefore patentable in their present form.

1. Claim 11 Is Patentable Over Yamazaki

Claim 11 is believed patentable at least due to its dependence from base claim 1 and/or any intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 11 under 35 U.S.C. 103(a).

2. Claim 13 Is Patentable Over Yamazaki

Claim 13 is directed to the method of claim 12, wherein, in response to receiving said communication frame that does not have said expected sequence number, the host-based networking hardware sends an acknowledgement including the frame number of a last successfully received communication frame to the user that owns the data channel.

(Emphasis added). The Examiner references the Williams, et al. reference for showing it is common in the art to use acknowledgements. Note, however, that the rejection of claims 11 and 13-16 does not rely on Williams, et al. as a secondary reference. Notwithstanding, the Examiner does not address how the portion of claim 13 underlined above is disclosed, taught or suggested by Yamazaki, even if modified by Williams, et al. Accordingly, the Examiner has not established prima facie obviousness of claim 13, wherein all the claim limitations must be taught or suggested by the prior art reference, i.e., Yamazaki. (See MPEP 2143; Emphasis added).

In addition, claim 13 is believed patentable at least due to its dependence from base claim 1 and/or any intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 13 under 35 U.S.C. 103(a).

3. Claims 14-16 Are Patentable Over Yamazaki

In rejecting claims 14-16, the Examiner references Williams, et al. as disclosing the general concepts of timeouts, but does not rely on Williams, et al. in combination with Yamazaki in the rejection of claims 14-16 under 35 U.S.C. §103(a). Yamazaki does not expressly disclose the use of timeouts, as acknowledged by the Examiner, nor does Yamazaki make any implicit disclosure of such. Accordingly, the rejection of claims 14-16 is not in proper form, since the rejection is not based on the use of Williams, et al. as a secondary reference in combination with Yamazaki, yet the Examiner relies on Williams, et al. for an aspect not disclosed in Yamazaki.

Claim 14 recites," The method of claim 10, wherein a timeout occurs when the host-based networking hardware does not receive said communication frame within a

predetermined time period." (Emphasis added). Claim 15 recites, "The method of claim 14, wherein the host-based networking hardware aborts a print job after a third said timeout." (Emphasis added). Claim 16 recites, "The method of claim 15, wherein the host-based networking hardware releases the data channel after the print job is aborted." (Emphasis added). Yamazaki does not expressly or implicitly disclose the actions recited in claims 14-16 in the event of a timeout. Thus, the fact that Williams, et al. discloses the general concepts of timeouts is irrelevant, since nothing in the sole reference relied upon, Yamazaki, expressly or implicitly discloses the use of timeouts as recited in Appellants' claims 14-16.

The Examiner states that the Yamazaki system "could easily use a timeout if frames are not received at the printer." However, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). MPEP 2143.01.

Thus, Appellants respectfully submit that the Examiner's burden in supporting the rejection of claims 14-16 has not been met.

In addition, claims 14-16 are believed patentable at least due to their respective dependence from base claim 1 and/or any respective intervening claim.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 14-16 under 35 U.S.C. 103(a).

C. Claim 19 Is Patentable Over Yamazaki Under 35 U.S.C. §103(a)

In the Final Office Action dated April 3, 2006, claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Yamazaki in view of Official Notice.

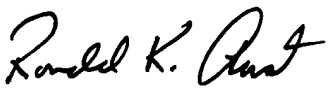
Claim 19 is believed patentable at least due to its dependence from base claim 18.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claim 19 under 35 U.S.C. 103(a).

D. Conclusion

For the foregoing reasons, Appellants submit that appealed claims 1-23 are patentable in their present form. Appellants respectfully requests that the Board reverse the final rejections of the appealed claims, and indicate that claims 1-23 are patentable in their present form.

Respectfully submitted,



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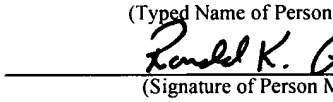
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(Typed Name of Person Mailing Paper or Fee)



(Signature of Person Mailing Paper or Fee)

IX. CLAIMS APPENDIX

1. A method of sharing a printer between a plurality of users on a computer network, said method comprising the steps of:

attaching host-based networking hardware to the printer;

providing a network communication protocol defining a command channel and a data channel;

allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis; and

instructing the host-based networking hardware to accept information on the data channel only from the user that owns the data channel.

2. The method of claim 1, wherein the host-based networking hardware disregards all said information received on the data channel from any of the users that do not own the data channel.

3. The method of claim 1, wherein the host-based networking hardware responds to a command on the command channel from any of the users.

4. The method of claim 3, wherein the host-based networking hardware responds with a status response.

5. The method of claim 4, wherein the status response indicates the user that owns the data channel.

6. The method of claim 1, wherein the user that owns the data channel can release the data channel by sending one of a close signal and a terminate signal on the command channel to the host-based networking hardware.

7. The method of claim 6, wherein a print job is aborted in response to the terminate signal.

8. The method of claim 6, wherein a user that does not own the data channel can acquire the data channel by sending a connect signal on the command channel to the host-based networking hardware.

9. The method of claim 1, wherein the network communication protocol defines a communication frame having at least one of a destination address field, a source address field, a frame identifier field, a command/data definition field, and a payload field.

10. The method of claim 9, comprising the further step of sending the communication frame from the user that owns the data channel to the host-based networking hardware.

11. The method of claim 10, wherein the host-based networking hardware sends an acknowledgement of receiving the communication frame to the user that owns the data channel.

12. The method of claim 10, wherein the communication frame has a frame number and a sequence number, the host-based networking hardware discarding any said communication frame that does not have an expected said sequence number.

13. The method of claim 12, wherein, in response to receiving said communication frame that does not have said expected sequence number, the host-based networking hardware sends an acknowledgement including the frame number of a last successfully received communication frame to the user that owns the data channel.

14. The method of claim 10, wherein a timeout occurs when the host-based networking hardware does not receive said communication frame within a predetermined time period.

15. The method of claim 14, wherein the host-based networking hardware aborts a print job after a third said timeout.

16. The method of claim 15, wherein the host-based networking hardware releases the data channel after the print job is aborted.

17. A method of sharing a network appliance between a plurality of users on a computer network, said method comprising the steps of:

providing a network communication protocol defining a command channel and a data channel;

allowing only one of the users to own the data channel at any single point in time on a fair-sharing first come first serve basis; and

instructing the network appliance to accept information on the data channel only from the user that owns the data channel.

18. A method of sharing a network appliance between a plurality of users on a computer network on a fair-sharing first come first serve basis, said method comprising the steps of:

using one of the users to transmit a data frame into the computer network;

receiving the data frame with said network appliance;

determining whether a first portion of the data frame includes a unique, predetermined sequence of data;

reading and processing a second portion of the data frame if the first portion of the data frame includes the predetermined sequence of data; and

discarding the data frame without reading and processing the second portion of the data frame if the first portion of the data frame does not include the predetermined sequence of data.

19. The method of claim 18, wherein the data frame has an Ethernet format.

20. The method of claim 18, wherein the first portion of the data frame comprises an initial portion of the data frame.

21. The method of claim 18, wherein said determining step is performed in real time without storing the data frame in a memory.

22. The method of claim 18, wherein the network appliance comprises a printer.

23. The method of claim 18, wherein said determining step is performed exclusively with hardware.

X. EVIDENCE APPENDIX

Included herein, and listed below, is a copy of each reference upon which the Examiner relied in rejecting one or more of the claims of the present application.

Exhibit:

A. U.S. Patent No. 6,785,727 B1(Yamazaki).

XI. RELATED PROCEEDINGS APPENDIX

(No Entries)